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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/582,582

03/20/2007

Ikuo Kawamoto

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11/05/2008

WESTERMAN, HATTORI, DANIELS & ADRIAN, LLP
1250 CONNECTICUT AVENUE, NW
SUITE 700
WASHINGTON, DC 20036

EXAMINER

NGUYEN, LAUREN

ART UNIT

PAPER NUMBER

2871

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/582,582	Applicant(s) KAWAMOTO ET AL.	
	Examiner LAUREN NGUYEN	Art Unit 2871	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-17 is/are pending in the application.
- 4a) Of the above claim(s) 6-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 16-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Art Unit: 2871

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed on 07/07/2008 have been fully considered but they are not persuasive.
2. The applicant argues (see page 7) regarding the amended **claim 1** that the references do not suggest such an effect of prevention of a light leakage in black image by controlling the angle alpha. This is not persuasive. "The fact that the applicant uses that method for a different purpose does not alter the conclusion that its use in a prior art device would be prima facie obvious from the purpose disclosed in the reference." In re Lintner, 173 USQP 560. In fact, **Tashiro et al.** (in at least paragraphs 0253-0259, figures 26-28) teaches a slow axis of the first birefringent layer is defined at one angle of $+21^{\circ}$ to $+27^{\circ}$ and -21° to -27° with respect to an absorption axis of the polarizer. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the angle alpha as taught by **Tashiro et al.** because such modification would improve the display characteristics.
3. Applicant's arguments with respect to **claim 1** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2871

5. **Claims 1-3** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kawata et al.** (US 2004/0004688) in view of **Tashiro et al.** (US 2004/0257506).

6. Regarding **claim 1**, **Kawata et al.** (figures 1-2) discloses an elliptically polarizing plate comprising a polarizer (see at least paragraph 0388, lines 3-8), a protective layer formed on one side of the polarizer (the alignment layer, see at least paragraphs 0047 and 0049), a first birefringent layer serving as a $\lambda/2$ plate, and a second birefringent layer serving as a $\lambda/4$ plate in the order given, wherein the first birefringent layer and the second birefringent layer are each formed by using a liquid crystal material (see at least paragraphs 0041 and 0047).

7. However, **Kawata et al.** does not disclose the limitations of **claim 1**. **Tashiro et al.** (in at least paragraphs 0253-0259, figures 26-28) teaches a slow axis of the first birefringent layer is defined at one angle of $+21^\circ$ to $+27^\circ$ and -21° to -27° with respect to an absorption axis of the polarizer. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the angle α as taught by **Tashiro et al.** because such modification would improve the display characteristics.

8. In addition, in the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. In re Wertheim, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); In re Woodruff, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). Similarly, a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. Titanium Metals Corp. of America v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). See MPEP § 2144.05.

Art Unit: 2871

9. Regarding **claims 2-3, Kawata et al.** discloses the limitations as shown in the rejection of **claim 1** above. However, **Kawata et al.** does not disclose the first birefringent layer has a thickness of 0.5 to 5 μm and the second birefringent layer has a thickness of 0.3 to 3 μm . **Kawata et al.** (in at paragraphs 0049-0050) teaches the first birefringent layer has a thickness of 0.5 to 5 μm and the second birefringent layer has a thickness of 0.3 to 3 μm (0.05 to 1 μm). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the thickness of the birefringent layers, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. In addition, in the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). See MPEP § 2131.05.

10. Regarding **claim 5, Tashiro et al.** (in at least paragraphs 0253-0259, figures 26-28) implicitly discloses the absorption axis of the polarizer and a slow axis of the second birefringent layer are substantially perpendicular to each other (Tashiro et al. implicitly teaches the angle $\beta = 2 \times \alpha + 45$, see at least paragraph 0256, that is, for example, $2 \times 22.5 + 45 = 90$ degrees or $2 \times 20 + 45 = 85$ degrees). In the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). See MPEP § 2131.05.

Art Unit: 2871

11. Regarding **claim 16, Kawata et al.** (figures 1-2) discloses an image display apparatus comprising the elliptically polarizing plate according to claim 1 (see at least paragraph 0001).
12. Regarding **claims 17-18, Tashiro et al.** (figures 26-28) implicitly discloses an in-plane retardation of the first and second birefringent layers at a wavelength of 590 nm is 220 to 305 nm and 90-180 nm, respectively (see at least paragraph 0254, **Tashiro et al.** clearly teaches that the retardation values of the half wave plate and the quarter wave plate are about $\lambda/2$ and $\lambda/4$ of the visible wavelength, respectively).
13. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. In addition, in the case where the claimed ranges "overlap or lie inside ranges disclosed by the prior art" a prima facie case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). See MPEP § 2131.05.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

Art Unit: 2871

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lauren Nguyen whose telephone number is (571) 270-1428. The examiner can normally be reached on M-F, 7:30-5:00 EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Nelms can be reached on (571) 272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/L. N./

Examiner, Art Unit 2871

/Andrew Schechter/

Primary Examiner, Art Unit 2871